Name _____ **Date** _____ **Period** _____

It's ALL ABOUT the GRAPHS!

Directions – Complete the following activities to learn more amazing information about graphs.

Activity 1 – There's More Than One!

Graphing is an important procedure used by scientist to display the data that is collected during an experiment. There are three main types of graphs that will be used in this class:

Pie/circle graphs: Used to show parts of a whole, usually uses percentages.

Line graphs: Use to show the change of one piece of information as it relates to another change over time.

Bar graphs: Used to compare amounts and quantities.

Both bar and line graphs have an "X" axis (horizontal) and a "Y" axis (vertical)

Parts of a Graph:

Title: Summarizes information being represented in ANY graph.

Independent Variable: What is changed and is placed on the X axis.

Dependent Variable: What is measured or the results and is placed on the **Y** axis.

Analysis Questions

1. What type of graph is used to compare amounts or quantities?

2. What type of graph is used to show a change over time?

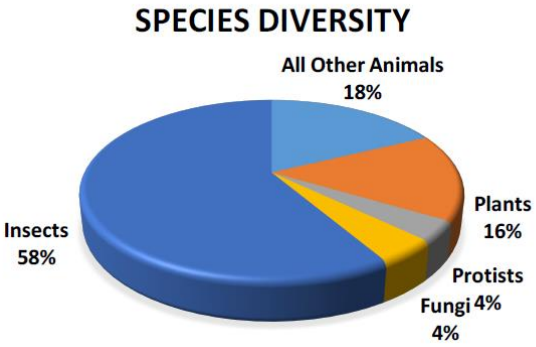
3. What type of graph is used to show parts of a whole?

4. What is the purpose of a graph title?

5. What is the difference between an independent variable and a dependent variable?

Activity 2 – Analyze This?

For questions 6 – 8 use the pie graph



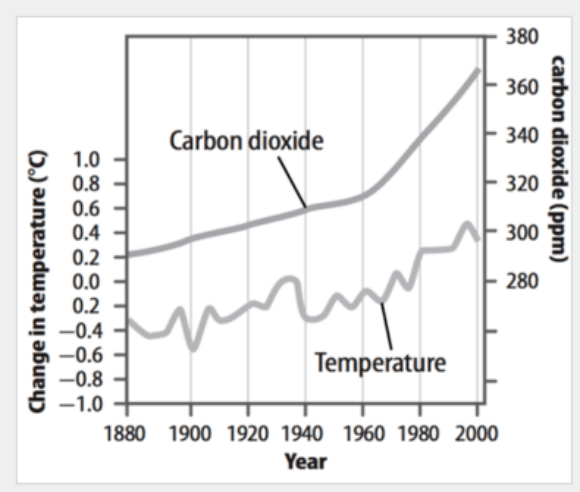
6. What is the graph title?

7. What percentage of the graph includes human beings?

8. How does the percentage of protists compare to the percentage of plants.

For questions 9 - 11 use the line graph

Comparing Carbon Dioxide and Temperature Change

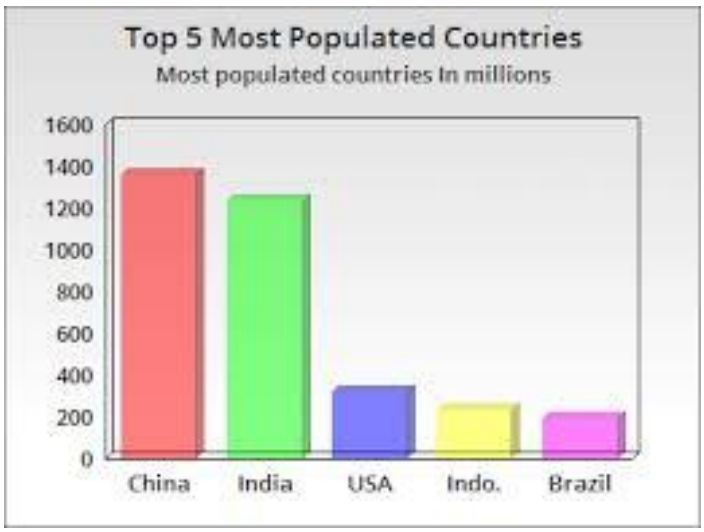


9. What is the line graph comparing?

10. What is placed in the x-axis?

11. According to the graph, how does temperature change compare to carbon dioxide

For questions 12 – 15 use the bar graph



12. What is the title to the bar graph?

13. Where is the independent variable located?

14. Where is the dependent variable located?

15. What is the difference in population between USA and China?